

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-2. (Cancelled)

3. (Currently amended) A monolithic rail platform for a firearm that includes a barrel assembly, the monolithic rail platform comprising:

a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly of the firearm therein;

an upper receiver portion extending rearwardly from and integrally formed with said handguard portion, said upper receiver portion adapted to receive a bolt carrier therein; and

a coupling portion at a forward end of said upper receiver portion and integral with said handguard portion, said coupling portion adapted to releasably clamp a rearward end of the barrel assembly extending through said handguard portion to said upper receiver portion, wherein said upper receiver, said handguard portion and said coupling portion are integrally unitarily constructed.

4. (Original) The platform of claim 3, wherein said upper receiver portion includes a longitudinal axis and said coupling portion includes a slot extending in the direction of said longitudinal axis separating said coupling portion into first and second clamping portions positioned on respective sides of said slot.

5. (Previously presented) The platform of claim 4, further comprising at least one fastener positionable through said coupling portion transversely to said longitudinal axis, said at least one fastener operable to bring said clamping portions toward one another to clamp the barrel assembly in said coupling portion.

6. (Previously presented) The platform of claim 5, further comprising a pair of

fasteners positionable through said coupling portion transversely to said longitudinal axis, one of said pair of fasteners positioned against an enlarged portion of the barrel assembly to resist forward movement of the barrel assembly.

7. (Cancelled)

8. (Currently amended) A monolithic rail platform for a rotating bolt type firearm that includes a barrel assembly, the monolithic rail platform comprising:

a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly of the rotating bolt type firearm therein;

an upper receiver portion extending rearwardly from and integrally formed with said handguard portion, said upper receiver portion adapted to receive a bolt carrier therein; and

a contiguous upper rail extending rearwardly along said handguard portion and said upper receiver portion.

9. (Previously presented) The platform of claim 8, wherein said upper rail includes a passage formed therealong for delivering gas from a forward end of the barrel.

10-14. (Cancelled)

15. (Currently amended) A monolithic rail platform for a ~~M16/AR15~~ type firearm that includes a barrel assembly and a barrel extension with a barrel extension bore, the monolithic rail platform comprising:

a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly of the ~~rotating bolt type~~ firearm therein;

an upper receiver portion extending rearwardly from and integrally formed with said handguard portion;

~~a barrel extension at the rearward end of the barrel assembly;~~

a longitudinal bore extending through said upper receiver portion ~~in communication with the barrel extension;~~ and

a bolt assembly movably positioned in said longitudinal bore, the bolt assembly including a bolt carrier having a protrusion at a forward end thereof and a bolt carrier bore in a bolt receiving portion that extends through the protrusion at a substantially constant bore diameter of a bolt receiving portion of the bolt carrier, the protrusion being sized for receipt in the barrel extension the barrel extension bore when the monolithic rail platform is part of the firearm thereby increasing a stroke length of the bolt carrier in a longitudinal bore of said upper receiver portion to increase the dwell time of a bolt by up to approximately twice that provided by M16/AR15 type bolt carriers without the protrusion, wherein a first inner diameter of the bolt receiving portion is substantially equal to a second inner diameter of the protrusion.

16. (Canceled)

17. (Previously presented) The platform of claim 15, further comprising a coupling portion at a forward end of said upper receiver portion integral with said handguard portion, said coupling portion adapted to releasably clamp a rearward end of the barrel assembly extending through said handguard portion to said upper receiver portion.

18. (Previously presented) The platform of claim 17, wherein said upper receiver portion includes a longitudinal axis and said coupling portion includes a slot extending in the direction of said longitudinal axis separating said coupling portion into first and second clamping portions positioned on respective sides of said slot.

19. (Previously presented) The platform of claim 18, further comprising at least one fastener positionable through said coupling portion transversely to said longitudinal axis, said at least one fastener operable to bring said clamping portions toward one another to clamp the barrel assembly in said coupling portion.

20. (Previously presented) The platform of claim 15, wherein said handguard portion includes a number of rails extending therealong separated by recessed portions therebetween.

21. (Previously presented) The platform of claim 20, wherein said number of rails includes a contiguous upper rail extending rearwardly along said upper receiver portion.

22. (Previously presented) The platform of claim 15, wherein said handguard portion extends along the barrel assembly to a position adjacent a forward end of the barrel assembly.

23. (Previously presented) The platform of claim 15, wherein the barrel assembly is attachable to said upper receiver portion and said handguard portion extends around and is separated from the barrel assembly.

24. (Previously presented) The platform of claim 15, wherein the bolt carrier includes a forward end portion and a rearward end portion, the forward end portion including a number of lands extending therealong and spaced thereabout for contacting said upper receiver portion in said bore, said number of lands occupying from about 1% to about 12% of a surface area of the forward end portion along which the number lands extend.

25. (Previously presented) The platform of claim 15, wherein the protrusion extends into the barrel extension for a distance of one hundred thousandths of an inch when the bolt carrier is positioned completely forwardly in said upper receiver portion.

26. (Currently amended) A monolithic rail platform for a rotating bolt type firearm that includes a barrel assembly, the monolithic rail platform comprising:

a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly of the rotating bolt type firearm therein;

an upper receiver portion extending rearwardly from and integrally formed with said handguard portion;

a longitudinal bore extending through said upper receiver portion ~~in communication with the barrel assembly~~; and

a bolt assembly movably positioned in said longitudinal bore, the bolt assembly including a bolt carrier including a forward end portion and a rearward end portion, the forward end portion including a number of lands extending therealong and spaced thereabout, the number of lands occupying from about 1% to about 12% of a surface area of the forward end portion along which the number of lands extend.

27. (Previously presented) The platform of claim 26, wherein the number of lands occupy from about 1% to about 8% of the surface area of the forward end portion.

28. (Previously presented) The platform of claim 26, wherein the number of lands occupy from about 1% to about 4% of the surface area of the forward end portion.

29. (Previously presented) The platform of claim 26, wherein the number of lands occupy about 4% of the surface area of the forward end portion.

30. (Previously presented) The platform of claim 26, wherein the barrel assembly includes a barrel extension at a rearward end thereof.

31. (Currently amended) The platform of claim 26, wherein said monolithic rail platform is suitable for a M16/AR15 type rifle and wherein said bolt carrier includes a protrusion at a forward end thereof and a bolt carrier bore in a bolt receiving portion that extends through said protrusion at a substantially constant bore diameter, said protrusion being sized for receipt in a barrel extension in the barrel assembly thereby increasing a stroke length of said bolt carrier in said longitudinal bore of said upper receiver portion to increase the dwell time of a bolt by up to approximately twice that provided by M16/AR15 type bolt carriers without the protrusion.

32. (Canceled)

33. (Previously presented) The platform of claim 26, further comprising a coupling portion at a forward end of said upper receiver portion and integral with said handguard

portion, said coupling portion adapted to releasably clamp a rearward end of the barrel assembly extending through said handguard portion to said upper receiver portion.

34. (Previously presented) The platform of claim 33, wherein said upper receiver portion includes a longitudinal axis and said coupling portion includes a slot extending in the direction of said longitudinal axis separating said coupling portion into first and second clamping portions positioned on respective sides of said slot.

35. (Previously presented) The platform of claim 26, wherein said handguard portion extends along the barrel assembly to a position adjacent a forward end of the barrel assembly.

36. (Previously presented) The platform of claim 26, wherein the barrel assembly is attachable to said upper receiver portion and extends through said handguard portion in a floating relationship therewith.

37. (Cancelled)

38. (Currently amended) A monolithic rail platform for a rotating bolt type firearm that includes a barrel assembly, comprising:

- a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly of the rotating bolt type firearm therein;

- an upper receiver portion extending rearwardly from and integrally formed with said handguard portion;

- a bolt carrier received in said upper receiver portion;

- a longitudinal bore extending through said upper receiver portion ~~in communication with the barrel assembly~~; and

- a protrusion at a forward end of a bolt receiving portion of the bolt carrier ~~and a bolt carrier bore in a bolt receiving portion that extends through the protrusion at a substantially constant bore diameter~~, the protrusion being sized for receipt in the barrel assembly thereby increasing a stroke length of the bolt carrier in said longitudinal bore

of said upper receiver portion by approximately one hundred thousandths of an inch for an rotating bolt type rifle, wherein a first inner diameter of the bolt receiving portion is substantially equal to a second inner diameter of the protrusion.

39-50. (Cancelled)

51. (Currently amended) A monolithic platform for a firearm that includes a barrel assembly, the platform comprising:

a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly of the firearm therein;

an upper receiver portion extending rearwardly from and integrally formed with said handguard portion, said upper receiver portion adapted to receive a bolt carrier therein; and

a coupling portion between said handguard portion and said upper receiver portion, said coupling portion including a longitudinal slot separating said coupling portion into first and second clamping portions on respective sides of said slot, wherein said first and second clamping portions are constructed and arranged such that a fastener positioned through said coupling portion transversely to said longitudinal slot is operable to bring said first and second clamping portions toward one another to clamp the barrel assembly in said coupling portion.

52. (Previously presented) The platform of claim 51, wherein said handguard portion is constructed and arranged so that the barrel assembly extends through said handguard portion in a floating relationship therewith when the handgaurd portion is clamped in said coupling portion.

53. (Previously presented) The platform of claim 51, wherein the fastener is positionable in a recess in an outer surface of the barrel assembly to resist forward movement of the barrel assembly.

54. (Previously presented) The platform of claim 51, further comprising a contiguous upper rail extending across said upper receiver portion and said handguard portion.

55. (Previously presented) The platform of claim 51, wherein said handguard portion including a rail extending along the longitudinal axis of the handguard portion.

56. (Currently amended) The platform of claim 51, wherein said upper receiver portion is constructed and arranged to receive ~~[[a]] an M16/AR15 type~~ bolt carrier therein and said upper receiver portion is constructed and arranged to receive an M16 /AR15 type lower receiver.

57-60. (Cancelled)

61. (Previously presented) The platform of claim 3, wherein said coupling portion is constructed and arranged to releasably clamp a substantially smooth portion of the barrel assembly.

62. (Previously presented) The platform of claim 6, wherein said coupling portion is constructed and arranged to releasably clamp a substantially smooth portion of the barrel assembly.

63. (Previously presented) The platform of claim 62, further comprising a passage that provides a path for delivering gas between a gas tube coupled to the barrel assembly and the bolt carrier.

64. (Previously presented) The platform of claim 3, further comprising a contiguous upper rail extending rearwardly along said handguard portion and said upper receiver portion.

65. (Previously presented) The platform of claim 64, further comprising a number of rails extending along a bottom and sides of said handguard portion separated by recessed portions between said rails.

66. (Previously presented) The platform of claim 8, wherein said handguard portion is constructed and arranged so that a forward end of the barrel assembly is positioned proximate to said handguard portion when the handguard portion is received in the handguard portion.

67. (Previously presented) The platform of claim 8, further comprising a coupling portion at a forward end of said upper receiver portion and integral with said handguard portion, said coupling portion adapted to releasably clamp a rearward end of the barrel assembly extending through said handguard portion to said upper receiver portion.

68. (Previously presented) The platform of claim 67, wherein said handguard portion is arranged so that the barrel assembly extends through said handguard portion in a floating relationship therewith when the handguard portion is clamped in said coupling portion.

69. (Previously presented) The platform of claim 67, wherein said coupling portion is constructed and arranged to releasably clamp a substantially smooth portion of the barrel assembly.

70. (Previously presented) The platform of claim 69, further comprising a passage that provides a path for delivering gas between a gas tube coupled to the barrel assembly and the bolt carrier.

71. (Cancelled)

72. (Previously presented) The platform of claim 53, wherein said coupling portion is constructed and arranged to clamp a substantially smooth portion of the barrel assembly.

73. (Previously presented) The platform of claim 17, wherein said coupling portion is constructed and arranged to releasably clamp a substantially smooth portion of the barrel assembly.

74. (Previously presented) The platform of claim 17, wherein said upper receiver, said handguard portion and said coupling portion are integrally unitarily constructed.

75. (Previously presented) The platform of claim 38, wherein said bolt carrier further comprises a modified cam path lengthened approximately 0.100 of an inch toward a forward end of said bolt carrier as compared to a standard bolt carrier for a rotating bolt.

76. (Currently amended) A monolithic rail platform for ~~a M16/AR15 type firearm~~, use with an M16 lower receiver and a barrel assembly, the monolithic rail comprising:

a handguard portion adapted to receive at least a portion of ~~[[a]]~~ the barrel assembly therein; ~~and~~

an upper receiver portion extending rearwardly from and integrally formed with said handguard portion, wherein said upper receiver portion is constructed and arranged to receive an ~~M16/AR15 type~~ lower receiver; and

a contiguous upper rail extending across said handguard portion and said upper receiver portion.

77. (Previously presented) The platform of claim 76, further comprising a coupling portion between said handguard portion and said upper receiver portion, said coupling portion including a longitudinal slot separating said coupling portion into first and second clamping portions on respective sides of said slot, wherein said first and second clamping portions are constructed and arranged such that a fastener positioned through said coupling portion transversely to said longitudinal slot is operable to bring said first

and second clamping portions toward one another to clamp the barrel assembly in said coupling portion.

78. (Previously presented) The platform of claim 77, wherein said upper receiver, said handguard portion and said coupling portion are integrally unitarily constructed.

79. (Previously presented) The platform of claim 77, wherein the fastener is positionable in a recess in an outer surface of the barrel assembly to resist forward movement of the barrel assembly.

80. (Previously presented) The platform of claim 77, wherein said coupling portion is constructed and arranged to clamp a substantially smooth portion of the barrel assembly.

81. (Currently amended) The platform of claim 76, wherein said upper receiver portion is constructed and arranged to receive ~~[[a]] an M16/AR15 type~~ bolt carrier therein.

82. (Currently amended) The platform of claim ~~76~~ 26, further comprising a contiguous upper rail extending across said handguard portion and said upper receiver portion.